

REMARKS

This Amendment is submitted in response to the Official Letter dated July 14, 2004. Favorable reconsideration of the application, as amended, is respectfully requested.

Amendments to the Specification

The Examiner provided guidelines that indicated the *preferred* section headings and order for the Specification. Although not required, the current amendment nevertheless adds those section headings not previously included in the original application or the preliminary amendment filed with the application on January 28, 2004, and indicates the non-applicability of each of these, with the exception of the "TITLE" heading. No narrowing of the scope of the application is intended by these amendments, and such amendments were not made for reasons of patentability. Accordingly, Applicant continues to assert the full range of protection available under the Doctrine of Equivalents.

Claim Rejections - 35 U.S.C. § 102

Applicant acknowledges with thanks the Examiner's allowance of Claims 15 through 22. Claims 1 through 23 remain pending in the Application.

Applicant notes that the Examiner indicated in the Office Action Summary that only Claims 1 through 22 were pending in the application. Applicant respectfully refers the Examiner to the last page of the Preliminary Amendment filed January 28, 2004, in which Claim 23 was presented as a new independent claim. Applicant respectfully requests that the Examiner indicate whether Claim 23 was considered or not. If Claim 23 was considered, Applicant respectfully requests that the Examiner indicate whether it was allowed or not. If not allowed, Applicant's request that Claim 23 either be reconsidered and allowed in light of the following arguments relating to Claims 1 through 14, or that the next Office Action be NON-FINAL so that Applicant can consider any arguments the Examiner may wish to make regarding Claim 23, which were obviously not made in the first Office Action in the Official Letter dated July 14, 2004.

The Examiner rejected Claims 1 through 14 under 35 U.S.C. § 102(a) as being anticipated by U.S. Pat. No. 6,244,295 to Barissek et al. The device described in U.S. Pat.

No. 6,244,295 is a check valve having a tubular valve housing 12. A bore 16 is formed through the housing 12 with a valve seat 18 formed therein in the form of a shoulder. A valve ball 22 is movably disposed in the bore 16, and is urged into engagement with the valve seat 18 by a spring 30. The spring 30 acts between the ball 22 and a perforated disk 26 that is press fit into the bore 16 (in the embodiment of Fig. 1) or captured therein by deforming the valve body 12 radially inwardly by the exertion of force from the outside (column 4, lines 57-60).

U.S. Pat. No. 6,244,295 describes that both the perforated disc 26 (i.e., the "inner component") and the valve housing 12 (i.e., the "outer component") may be made from either a metal or an injection-molded plastic (see column 2, lines 62-64 and column 4, lines 11-13). Importantly, however, there is no description or teaching in this prior art that the inner component and outer component should be made from *mutually different* materials. Furthermore, contrary to the assertion of the Examiner, there is also no hint or suggestion that their respective materials should have different coefficients of thermal expansion, as is recited in each of Applicant's three independent claims, Claim 1, 15, and 23. On the contrary, the suggestion seems to be that the inner and outer components of the valve assembly described in U.S. Pat. No. 6,244,295 would be made of the same material - selected from either a metal or an injection-molded plastic - and the inner and outer components would thus have the same coefficient of expansion.

Secondly, in the embodiment illustrated in Fig. 4 of the citation (and referred to by the Examiner) the "inner component" 26 is secured within the end of the "outer component" 12 by the application of compressive forces in the direction of arrows 46, those forces plastically deforming the walls of the valve housing 12 inwardly around the perforated disc 26. Claim 1 of the present application, on the other hand, defines a positive engagement between the inner component and the outer component formed by a thermally induced flow of the inner component into the internal-diameter enlargement of the outer component.

With the composite of the present invention, there is no inward crushing of the outer component around the inner component. It is simply the greater capacity for thermal expansion of the inner component of the composite that gives rise to the positive engagement of the inner component into the inwardly directed enlargement of the outer

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component. Thus, the present invention has absolutely no association with the concept of plastically deforming the outer component to secure the inner component therein.

For all the above reasons, the invention defined in Claim 1 (and Claims 2 through 14, which depend therefrom), Claim 15 (and Claims 16 through 22, which depend therefrom), and Claim 23 are clearly different and clearly patentable over cited U.S. Pat. No. 6,244,295. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejections of the pending claims, and to issue a Notice of Allowance.